New HIV Testing Algorithm: Promising Tool in the Fight Against HIV

[Announcer] This program is presented by the Centers for Disease Control and Prevention.

The new HIV testing algorithm is a promising tool in the fight against HIV. Testing is the linchpin for preventing and treating HIV. Unfortunately, one in eight people living with HIV in the United States don't know they're infected, so they're not getting essential care and may unknowingly transmit the virus. For people who test HIV-positive, diagnosis opens the door to lifesaving treatment and reduces the risk of transmitting to others. Those who test negative are empowered to remain HIV-free.

Welcome to CDC Audio Rounds. I'm Dr. Phil Peters from the Division of HIV/AIDS Prevention. I'd like to share some information with you about a promising new tool in the fight against HIV.

People with acute HIV infection are more likely to transmit the virus because of very high viral loads. This makes early detection *critical* to prevention. CDC recommends a new approach for HIV testing in laboratories that capitalizes on the latest technology to improve diagnosis of acute infection. Recommendations feature a new testing algorithm that allows diagnosis of acute HIV as much as three to four weeks *earlier* than the previous testing approach.

The new algorithm begins with a combination immunoassay, also called a fourth-generation test, which detects HIV-1 *and* HIV-2 antibodies *and* HIV-1 p24 antigen. This test is more sensitive at diagnosing early infection because it detects the HIV-1 p24 antigen, which appears before antibodies develop. The HIV-1 Western blot, previously the confirmatory test, is no longer part of the recommended algorithm. Instead, reactive results are followed by an HIV-1/HIV-2 differentiating assay and if the differentiating assay is not reactive, then an HIV-1 RNA assay should also be performed. The new algorithm can only be used with serum or plasma specimens. Rapid fingerstick tests and oral fluid tests may still be useful when it's not feasible to draw blood.

In addition to the overall earlier diagnosis of acute HIV infection, the new algorithm provides more accurate laboratory diagnosis of HIV-2 infection, fewer indeterminate results, and faster turnaround time for most test results.

The new HIV testing algorithm has the potential to improve prevention efforts in the United States. CDC encourages primary care providers to test *all* patients for HIV at least once, and offers free supporting materials through the Act Against AIDS initiative's *HIV Screening*. *Standard Care*. campaign.

For more information about the new algorithm, please visit cdc.gov/hiv. Thank you.

[Announcer] For the most accurate health information, visit www.cdc.gov or call 1-800-CDC-INFO.